

HELLENIC NAVY HYDROGRAPHIC SERVICE



24th Meeting of Mediterranean and Black Seas Hydrographic Commission (MBSHC)

NATIONAL REPORT OF GREECE

2 - 4 July 2024

1. Hydrographic Service

General

Hellenic Navy Hydrographic Service (HNHS) is the governmental body of the Hellenic Republic responsible for conducting hydrographic and oceanographic surveys for the benefit of International and National Navigation as well as for the operational needs of the Hellenic Navy. The primary purpose of conducting hydrographic surveys is to produce and update nautical charts and other nautical publications aiming at the safety of life at sea and the protection of the environment around Greece.

2. Surveys

2.1. Coverage of new surveys

During the period 2021-2023, an extensive systematic program of surveys was conducted. The three hydrographic vessels of the HNHS had been working for 338 days on surveying operations. A total area of 7906 km² has been surveyed, covering national and international waters in the Aegean and Ionian seas. The main 2021-23 operations are depicted in Annex A.

2.2. New technologies and /or equipment

HNHS has been equipped with a new drone equipped with a 42 MP camera. The drone is used for seashore topography and has flying capacity up to 6 Bf wind.

HNHS has composed two newly formed littoral survey units. These units operate using a vessel which is equipped with state of the art multibeam echosounders and all necessary equipment, in order to conduct complete hydrographic shallow survey along the coast.

HNHS is installing a hull mounted multibeam echosounder with maximum effective range 850 m at HS STRAVON. It is to be used for littoral and medium depth waters.

3. New charts and updates

During last three years the cartographic program of HNHS was further continued with the production of new ENC's, updates and national and international paper charts. More specifically the HNHS cartographic production status is the following:

3.1. ENC's

To date 313 ENC's have been released. The ENC's are updated on a monthly basis. The present status of the HNHS ENC production program is shown in the following table:

Scale Category	Released ENC's	Target	Coverage %
1. Overview	1	1	100%
2. General	2	2	100%
3. Coastal	83	83	100%
4. Approach	26	71	37%
5. Harbour	42	72	58%
6. Berthing	159	207	77%
	313	436	71%

Chart schemings depicting Usage Bands coverage are attached at Annex B.

3.1.1. ENC distribution method

HNHS distributes its ENCs via IC-ENC where is a member.

3.2. S100 ERA

HNHS develops S-100 products and up to now we have produced a number of S-101 and S-102 test products, which have already been validated by IC-ENC.

3.3. National paper charts

The following paper charts have been published. The datum in all charts is WGS84.

CHART#	INT#	TITLE	SCALE 1:	YEAR
311/1	3773	BAY AND PORT OF THESSALONÍKI	10000	2021
421/2		SÝROS HARBOUR AND APPROACHES	10000 5000	2021
323/3		APPROACHES - ÁGIOS EFSTRÁTIOS PORT	50000 4000	2021
231/2	3497	PÁTRA HARBOUR	7500	2023
213/2		LEFKÁDA CHANNEL	5000 25000 10000	2023
334/1		CHÍOS HARBOUR	5000	2023
312/1	3768	VÓLOS PORT AND APPROACHES	7500	2023
331/5		KÝRMI HARBOUR	5000	2023
412/11	3762	PEIRAIÁS HARBOUR AND KERATSÍNI GULF	6000	2024
322/1		APPROACHES - ALEXANDROUPOLÍ PORT	20000	2024

A diagram of the new paper charts is attached at Annex C.

4. New publications & updates

4.1. New publications

PUBLICATIONS	YEAR
BX 01 - Tables of Distances (N. Miles) between the Hellenic Ports	2021
BX 03 - Hellenic Coastguard - Port Authorities and their Areas of Responsibility	2021
List of Lights of Hellenic Coasts	2021
XEE 64 - Symbols Abbreviations Terms Used On Hellenic Issue Nautical Charts	2023

4.2. Updated publications

PUBLICATIONS	YEAR
Reprint of Sailing Directions of Hellenic Coasts (Pilot) vol C' Ed. 2016	2023
Reprint of Sailing Directions of Hellenic Coasts (Pilot) vol A' Ed. 2015	2024

All publications are available at HNHS website www.hnhs.gr HNHS selling offices or through associated companies/ shops.

5. MSI

5.1. Existing infrastructure for transmission

HNHS acts as the Hellenic NAVTEX Coordinator for the sea areas covering Greek and adjacent seas (which are coordinated by NAVAREA III) and collects all the relevant Maritime Safety Information (MSI) providing accurate information which ships require for their safe navigation. For this purpose elaborates all the relevant navigational, meteorological and other safety and urgent information, in accordance with the standards, organization and procedures of the JOINT IMO/IHO/WMO MANUAL ON MARITIME SAFETY INFORMATION (MSI) drafting the corresponding NAVTEX bulletins. These bulletins are promulgated, on International and National NAVTEX Service using both English and Greek Languages, by three Hellenic NAVTEX Stations (IRAKLEIO – KERKYRA – LIMNOS), that were duly established since 1986 in accordance with IMO and IHO rules ,guidelines and principles and since then have been operating successfully broadcasting MSI within their respective NAVTEX Service Areas.

Serving the Safety of Navigation, Hellenic NAVTEX coordinator responds immediately to requests of adjacent NAVTEX Coordinators to promulgate MSI messages via the Hellenic NAVTEX Stations in cases of temporary technical problems.

In the last three years (2021 - 2023) a total of 1271 Navigational Warnings (NAVHELLEN) were delivered to the NAVAREA III Coordinator for further promulgation.

5.1.1. IRAKLEIO NAVTEX STATION [H] – [Q] – [S]

During its operation in 2021 - 2023 a total of 15317 NAVTEX bulletins have been transmitted, containing 5233 Navigational warnings (NAVWARNS), 8760 Meteorological – Forecasts, 1281 Meteorological warnings (GALEWARNS) and 43 Search and Rescue messages (SARWARNS).

5.1.2. KERKYRA NAVTEX STATION [K] – [P]

During its operation in 2021 - 2023 a total of 9061 NAVTEX bulletins have been transmitted, containing 1188 Navigational warnings (NAVWARNS), 6570 Meteorological – Forecasts, 1281 Meteorological warnings (GALEWARNS) and 22 Search and Rescue messages (SARWARNS).

5.1.3. LIMNOS NAVTEX STATION [L] – [R]

During its operation in 2021 - 2023 a total of 9051 NAVTEX bulletins have been transmitted, containing 1183 Navigational warnings (NAVWARNS), 6570 Meteorological – Forecasts, 1281 Meteorological warnings (GALEWARNS) and 17 Search and Rescue messages (SARWARNS).

Annex D describes the HELLENIC NAVTEX STATIONS SERVICE AREAS.

6. C-55

2024 update as follows:

Status of hydrographic survey of all navigable waters, including internal waters, out to the limits of the EEZ: (Please refer to the guidance given in the introductory text “Analysis of the Status of Surveys”.)

Survey coverage, where:

A = percentage which is adequately surveyed.

B = percentage which requires re-survey at larger scale or to modern standards.

C = percentage which has never been systematically surveyed.

	A	B	C
Depths < 200m	38	53	9
Depths > 200m	13	58	29

Status of nautical charting within the limits of the EEZ

Coverage of charts published by your organisation, where:

A = percentage covered by INT series, or a paper chart series meeting the standards in M-4.

B = percentage covered by Raster Navigational Charts (RNCs) meeting the standards in S-61.

C = percentage covered by ENC's meeting the standards in S-57.

Purpose/Scale	A	B	C
Offshore passage/Small	100	-	100
Landfall and Coastal passage/Medium	100	-	100
Approaches and Ports/Large	95	-	62
Percentage of Group A showing depths in metres	100		
Percentage of Group A referenced to a satellite datum	20		

7. Capacity Building

7.1. Domestic training

HNHS personnel was trained in hydrographic, oceanographic, various ENC production and Quality Control procedures.

7.2. Foreign training

HNHS personnel attended various foreign training courses, such as:

- Hydrographic Survey Program Category “B” in Busan (Korea) from 25th of July to 9th of December 2022
- Nautical Cartography Program Category “B” in Busan (Korea) from 19th of June to 3rd of November 2023
- S-57 to S-101 Training and Conversion Workshop in Singapore from 6th to 10th of November 2023
- ENC Validation Training Course in Taunton (UK) from 4th to 8th of December 2023

7.3. Status of national, bilateral, multilateral or regional development projects with hydrographic component

HNHS has signed bilateral arrangements with the HOs of Bulgaria, Cyprus, Georgia, Germany, Israel, France, Jordan, Korea, Montenegro, Norway, Romania, Russia, Slovenia, Tunisia, UK, Ukraine and USA. Discussions are in progress with Croatia, Romania, Egypt and France.

8. Oceanographic Activities

8.1. General

The mission of the HNHS in the area of Oceanography includes:

- Conducting oceanographic surveys in the Hellenic seas and the Eastern Mediterranean Sea and embodying the results into relevant studies.
- Supporting the Greek Navy and other national defense bodies by providing the required data and information for the tactical exploitation of the marine environment.
- Supplying oceanographic data and conduction of surveys on behalf of third parties both from the private and public sector.
- Prediction of the wave field in Greek waters.

8.2. Activities

- Oceanographic cruises using the HNHS hydrographic/oceanographic vessels for the assessment of the marine environment including the acquisition of physical and geological data along a network of sampling stations designed for the areas of interest to the Hellenic Navy. All data and information gathered is processed and used in order to support naval operations in relation to anti-submarine, mine and amphibious warfare.
- Continuous measurement of sea level with tide gauges in a network of 21 permanent stations, located at several Greek ports around the coastline of Aegean and Ionian Seas.
- Eight (8) Tide Gauge Stations are under upgrade until August 2024. This upgrade includes new sensors for measuring sea level in several Greek ports and full installation of Meteorological sensors in order to collect comprehensive environmental information.
- Prediction of the wave field based on the prevailing wind speeds and directions in a specific area in order to provide the Ministry of Mercantile Marine with information to assess the navigational conditions for specific vessel types in different areas.
- Sea level data flow on IOC/UNESCO (Sea Level Monitoring Facilities) from four (4) on-line stations
- Permanent Mean Sea Level Service (PSMSL): Monthly Mean Sea Level

The HNHS tide gauge network is depicted in Annex E.

9. Other activities

9.1. Participation in IHO Working Groups

Greece is a member of the IHO Council, as an IHO Member State with substantially high hydrographic interest. HNHS also participates in the following IHO bodies: IRCC, HSSC, MBSHC, HCA, WWNWS, WENDWG, S-130 PT, ECS PT, NCWG, IENWG, SCUFN.

9.2. Disaster prevention

Following the decision of IOC / UNESCO to develop a Regional Tsunami Warning Center (RTWC) at the Northeastern Atlantic, Mediterranean and Connected Seas area, Greece has started working on the creation of a National Tsunami Warning Center (NTWC). A number of National Agencies and Institutions contribute to this effort under the supervision of the Seismological Institute of the National Observatory of Athens.

9.3. Environmental protection

HNHS through data acquisition and processing as well as data reception through collaborative agents, institutes and universities, compiles hydrographic fair sheets, nautical charts and respective products that promote measures against climate change. HNHS in cooperation with other national organizations is responsible for the collection of any new mammal observation data, in order to update the existed database.

9.4. National SDI

HNHS participates in the national SDI of Greece, which was established in 2010 under the Environmental Ministry, contributing with data of its competence.

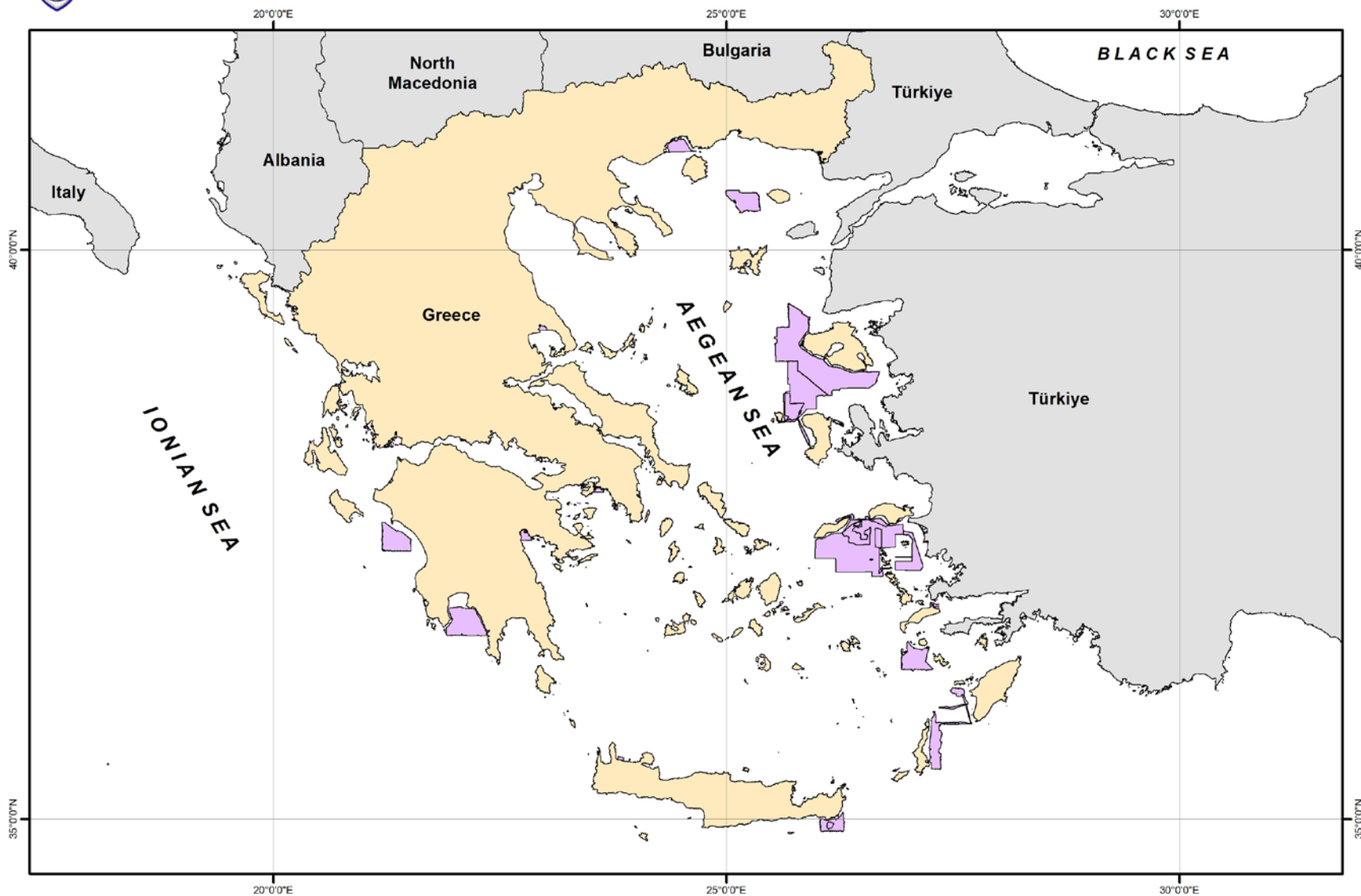
10. Conclusions

HNHS invests in people and utilizes modern tools to keep its rate of growth steadily ascending for the sake of the safety of Navigation and National Interests.



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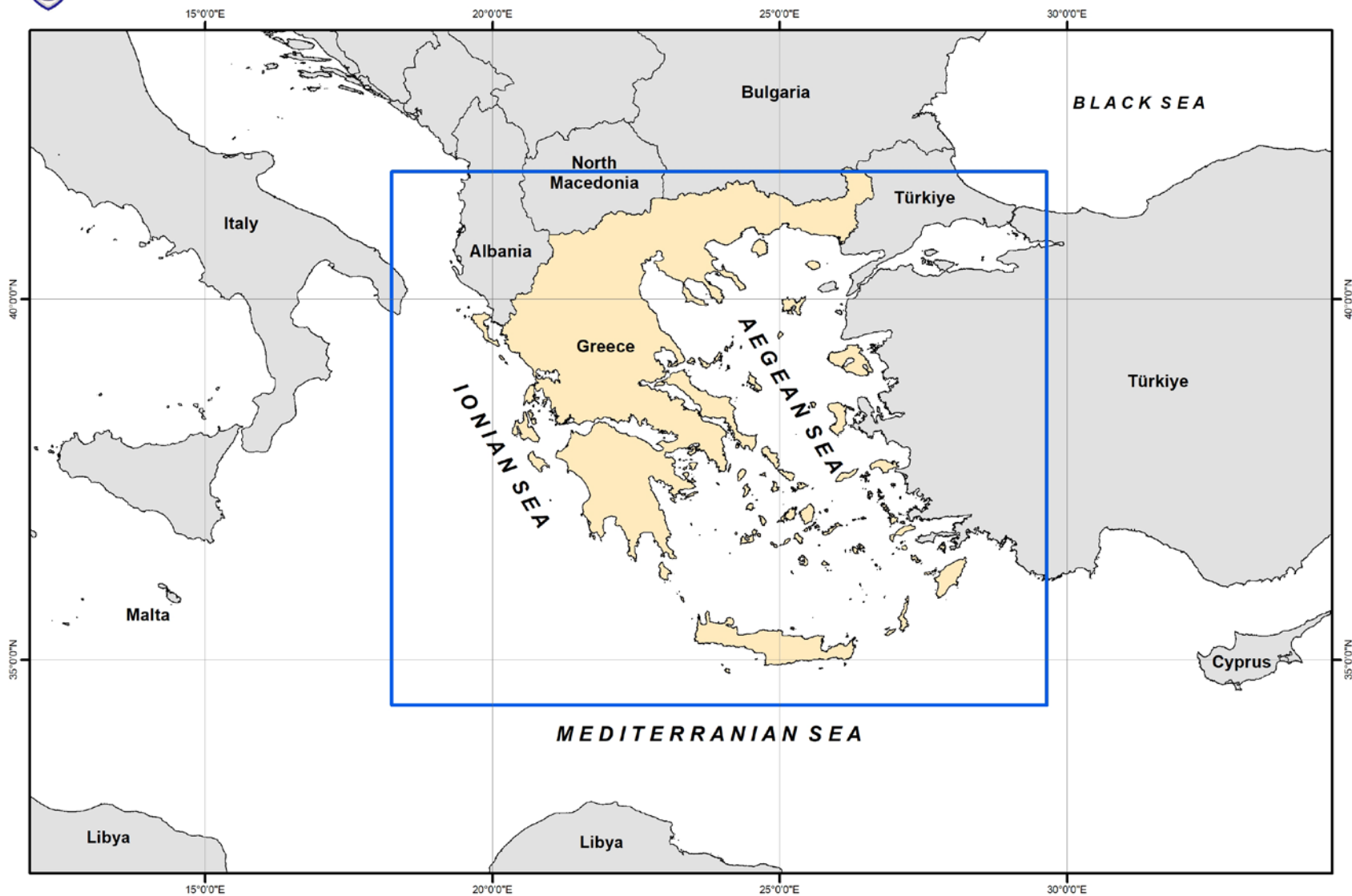
Hydrographic Activities 2021-2023





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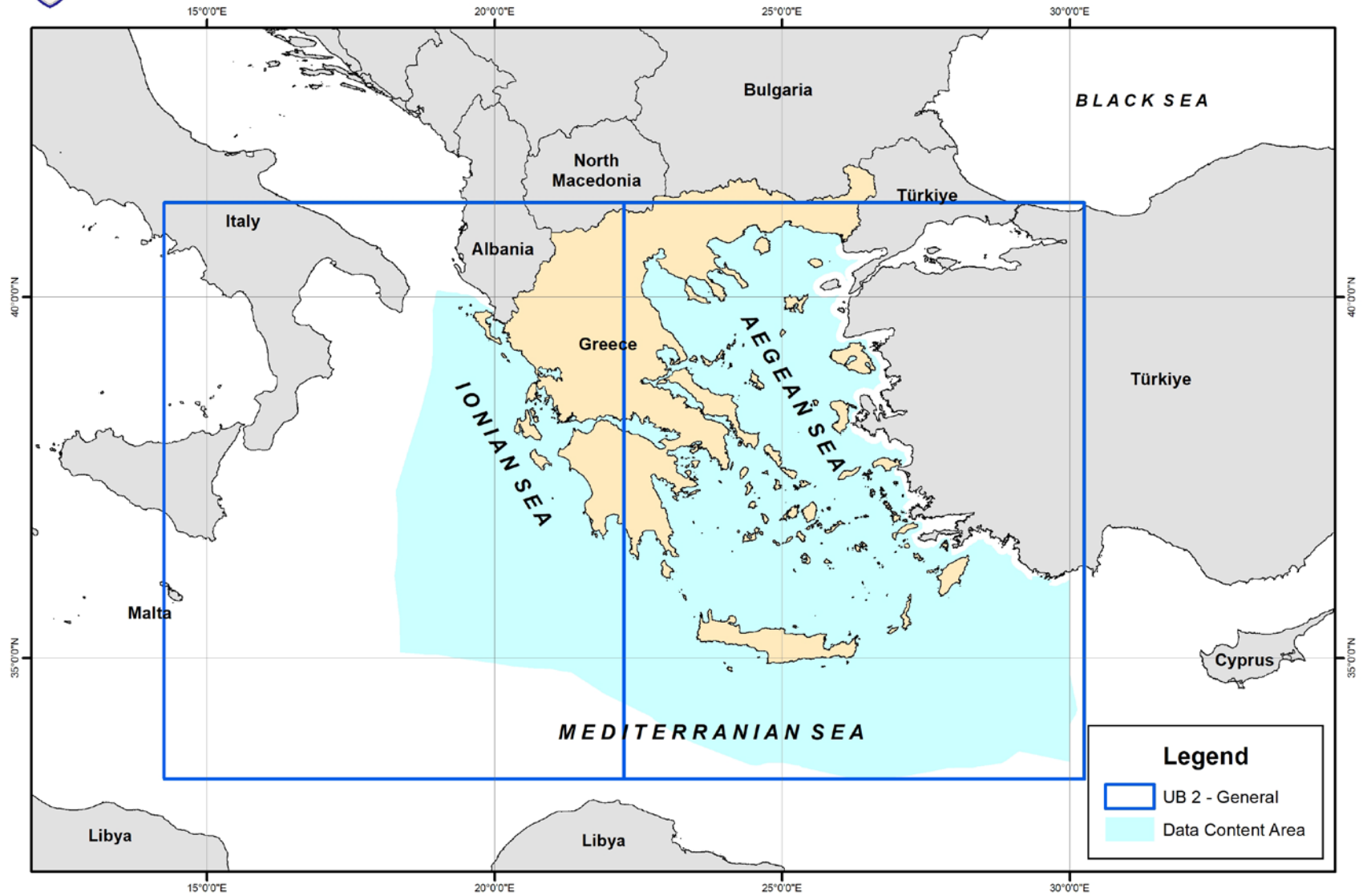
Usage Band 1 Coverage Overview





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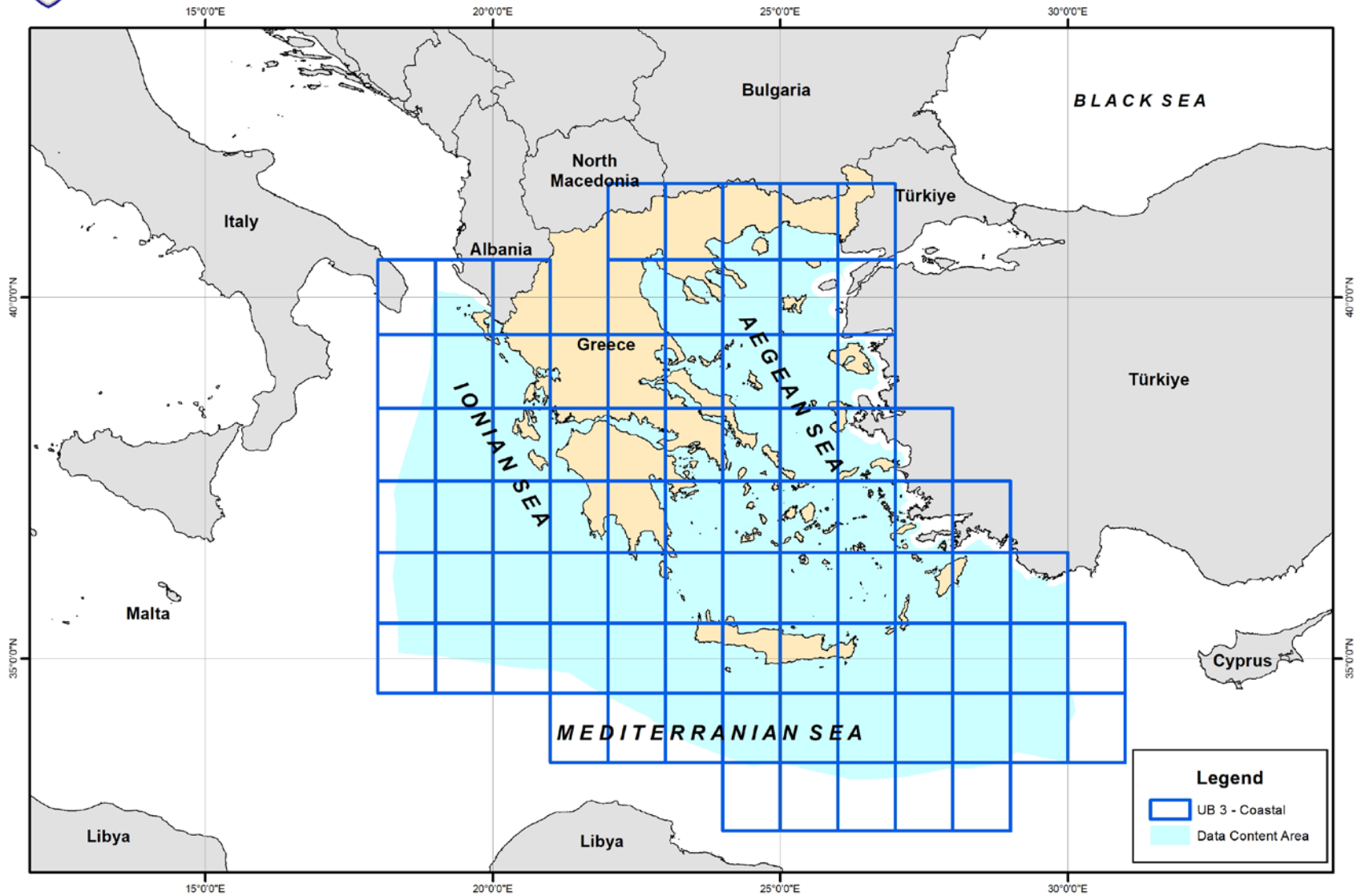
Usage Band 2 Coverage General





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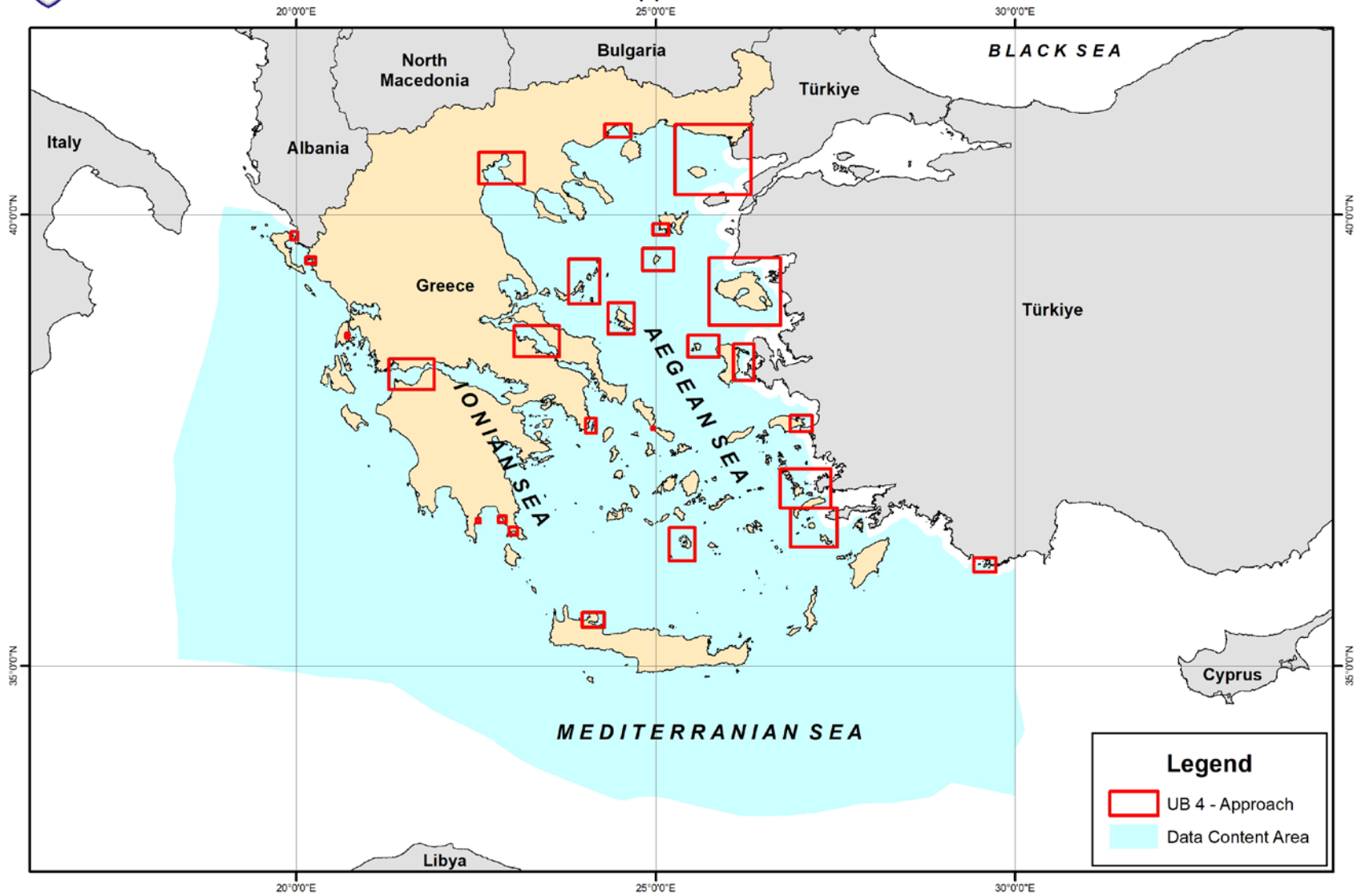
Usage Band 3 Coverage Coastal





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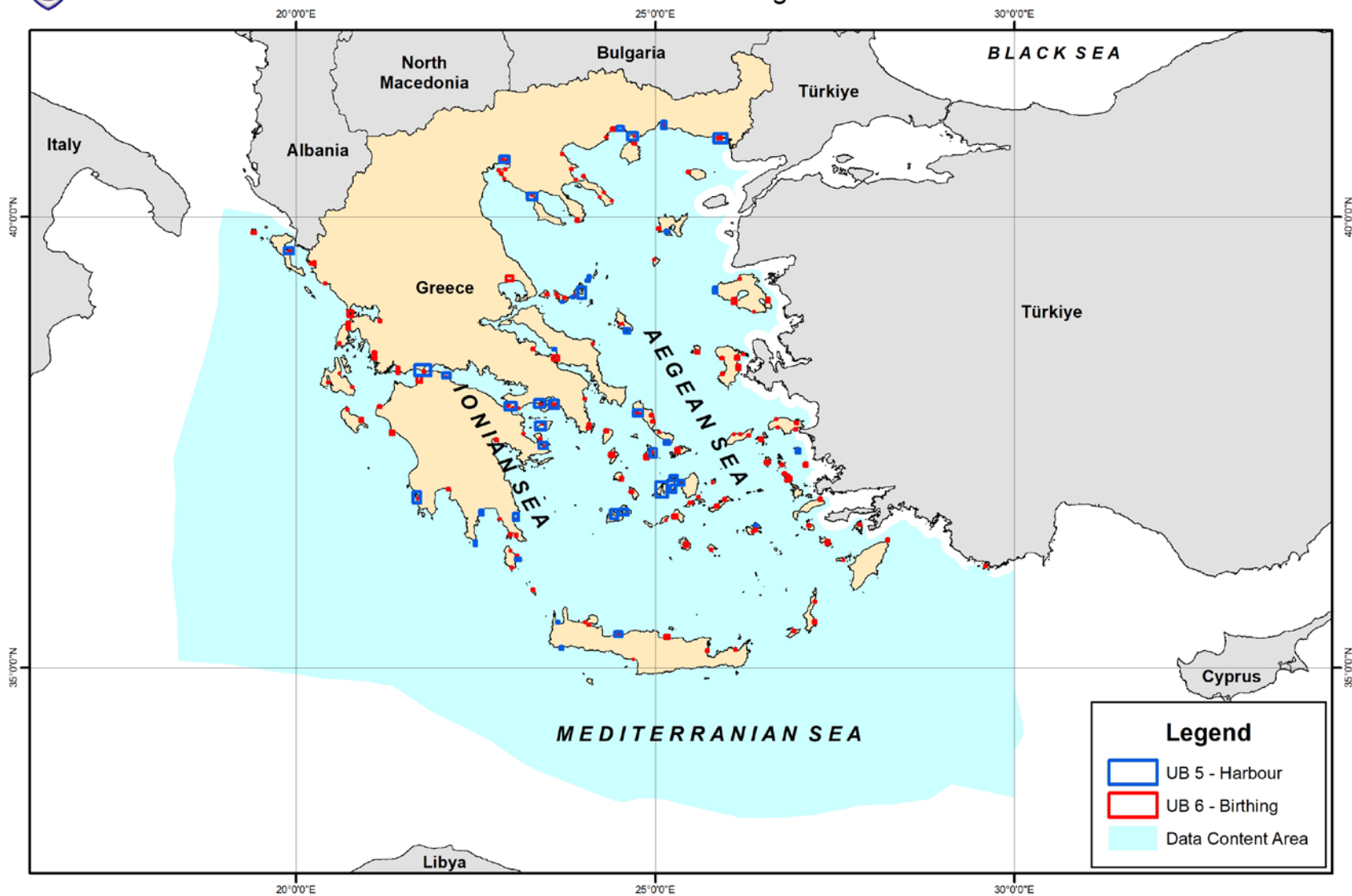
Usage Band 4 Coverage Approach





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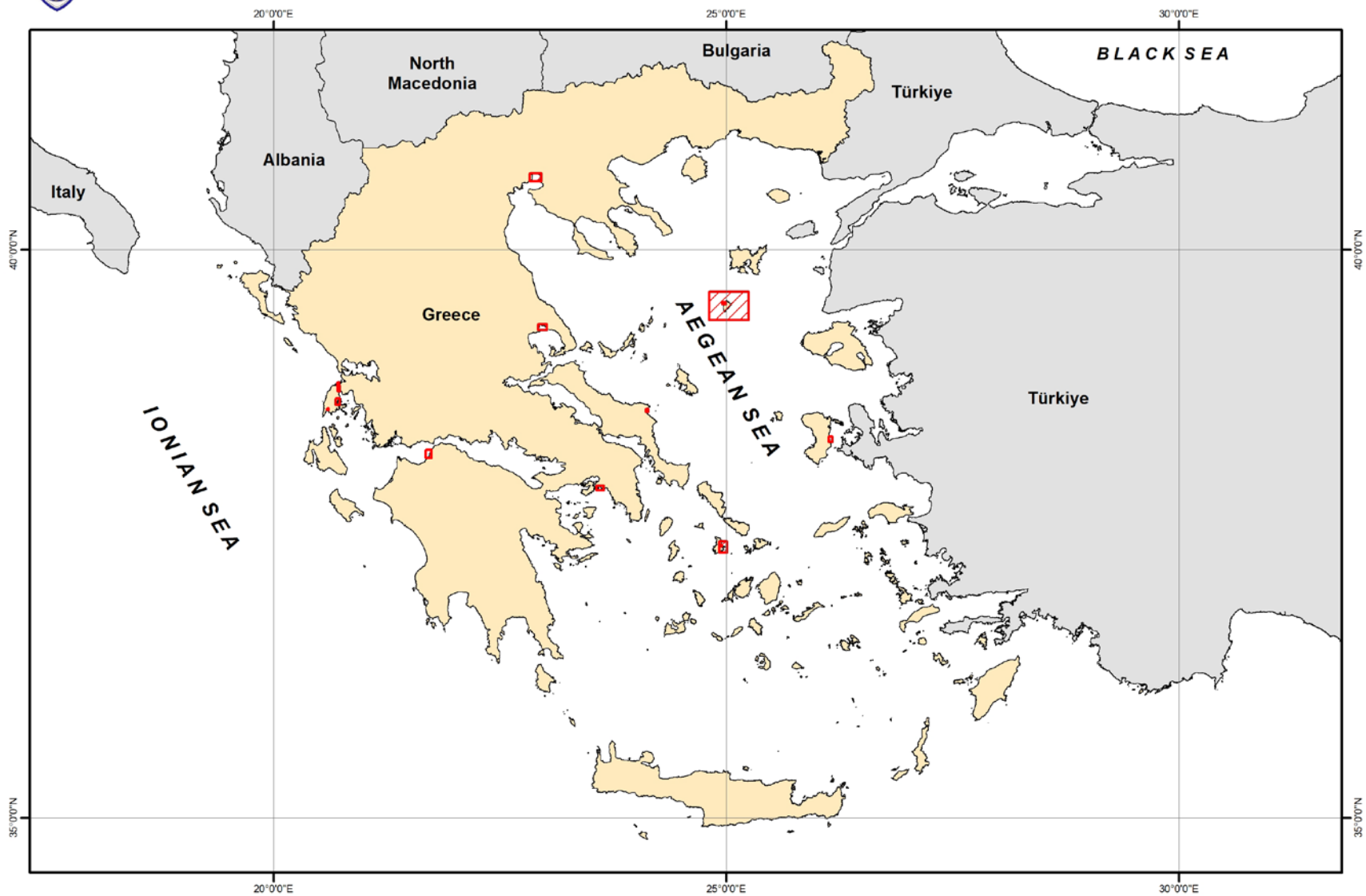
Usage Bands 5, 6 Coverage Harbour - Birthing





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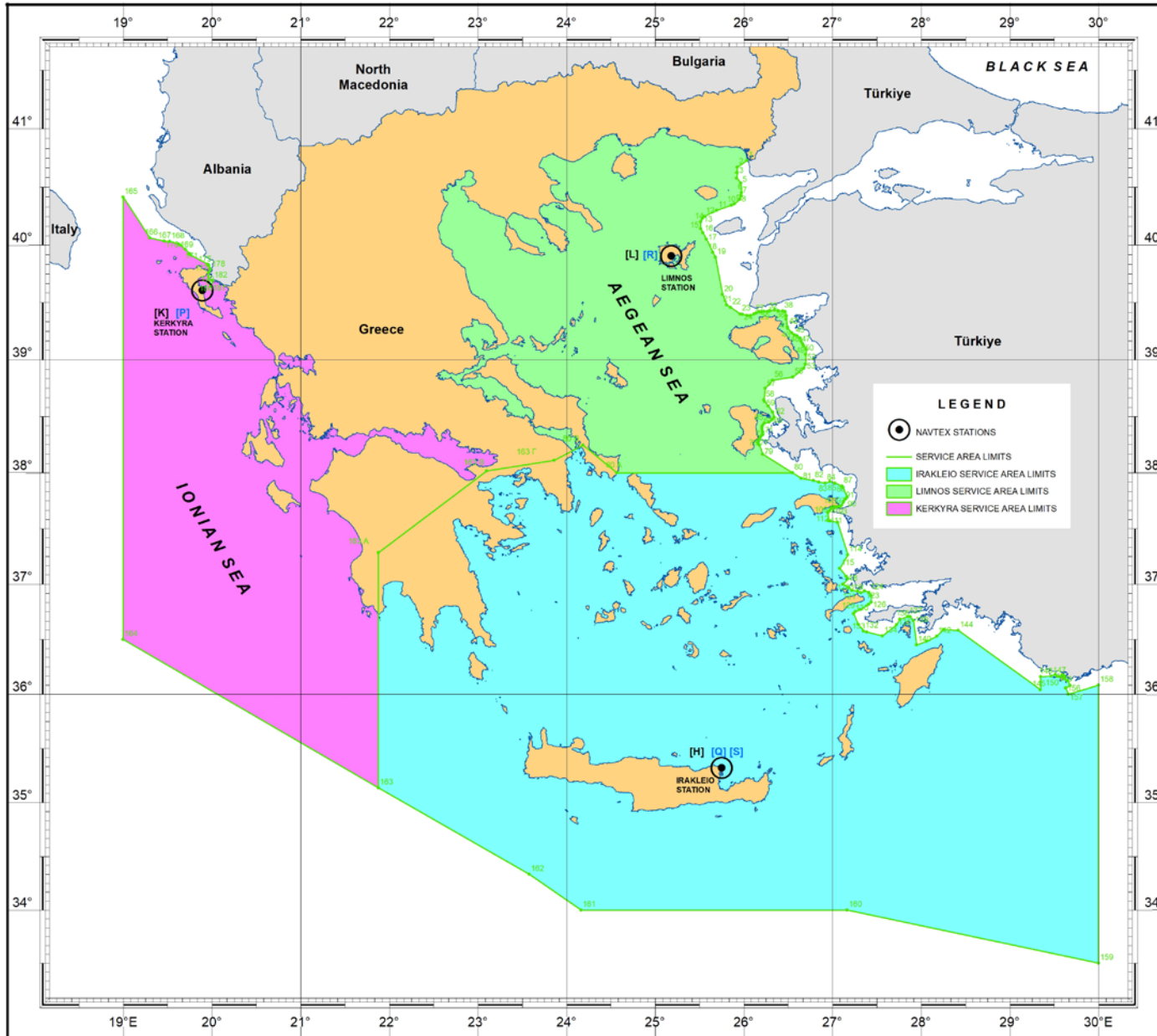
National Paper Charts





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HELLENIC NAVTEX STATIONS SERVICE AREAS





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Analogue and Digital Gauges

